

1FW

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

23

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1632
Examiner Name	SISSON, BRADLEY L.
Attorney Docket Number	51871.000004.UTL

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> 2 Information Disclosure Statements  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Copies of cited references 1-143, 163-167, and 174-218. Return Receipt Postcard. SB/08 Forms (18 pgs).
--	--	---

#### Remarks

The Commissioner is hereby authorized to charge any fees due in connection with this submission, or credit any overpayment to Deposit Account No. 02-4553 in the name of Buchanan Ingersoll Professional Corp.

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Buchanan Ingersoll, 401 West A Street, Suite 1900, San Diego, CA 92101		
Signature			
Printed name	David Maher		
Date	01-26-05	Reg. No.	40,077

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Tamara Smedley	Date	1-26-05

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



51871-000004.UTL  
U.S. Patent

UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of	)	Group Art Unit: 1632
	)	
BAZAN et al.	)	Examiner: SISSON, BRADLEY L.
	)	
Serial No.: 10/779,412	)	Customer. No. 23464
	)	
Filed: February 13, 2004	)	
	)	
For: METHODS AND COMPOSITIONS	)	
FOR DETECTION AND ANALYSIS	)	
OF POLYNUCLEOTIDE-BINDING	)	
PROTEIN INTERACTIONS	)	
USING LIGHT HARVESTING	)	
<u>MULTI-CHROMOPHORES</u>	)	

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97-1.98**

Mail Stop Amendment  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Information Disclosure Statement is being filed prior to receipt of a first Office Action on the merits with respect to the above-captioned application. Thus, it is believed that there is no fee due for filing this paper. However, if it is determined that a fee is due, the Commissioner is hereby authorized to charge the requisite fee, or any fees that may be due in connection with this and the attached papers, or with this application during its entire pendency, or to credit any overpayment, to Deposit Account No. 02-4553.

In accordance with 37 C.F.R. §1.56 and 37 C.F.R. §§1.97-1.98, this Information Disclosure Statement, including Forms PTO-SB/08 (11 pages) and cited documents, is provided herewith.

The items identified in this Information Disclosure Statement may or may not be "material" pursuant to 37 C.F.R. §1.56. The filing of this Information Disclosure Statement is not an admission by Applicants or Applicants' representatives that any of the documents, singly or in any combination, is material. Nor is it an admission that any of the items identified is


"prior art" against the subject application. Additionally, in accordance with 37 C.F.R. §1.97(h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other information as defined in 37 C.F.R. §1.56(b) exists in addition to those items submitted herewith.

Applicant respectfully requests that the Examiner review the foregoing documents and information and that they be made of record in the file history of the above-captioned application.

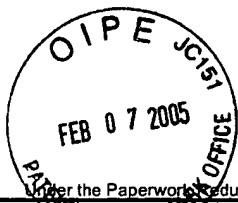
Respectfully submitted,

BUCHANAN INGERSOLL P.C.

Date: January 26, 2005

By:   
David W. Maher, Ph.D  
Reg. No. 40,077

One Oxford Centre  
301 Grant Street  
Pittsburgh, PA 15219-1410  
(O) (619) 578.5008  
(F) (619) 578.5940



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	1	BALAKIN, K.V. et al. Conjugates of oligonucleotides with polyaromatic fluorophores as promising DNA probes <sup>1</sup> ; <i>Biosensors and Bioelectronics</i> (1998) 13:771-778.	
	2	BARDEA, A. et al. Sensing and amplification of oligonucleotide-DNA interactions by means of impedance spectroscopy: a route to a Tay-Sachs sensor; <i>Chem. Commun.</i> (1999) 21-22.	
	3	BAUR, J.W., et al. Thin-Film Light-Emitting Devices Based on Sequentially Adsorbed Multilayers of Water-Soluble Poly (p-phenylene)s; <i>Advanced Materials</i> (1998) 10:17:1452-1455.	
	4	BEHR, J.P. Synthetic Gene-Transfer Vectors; <i>Acc. Chem. Res.</i> (1993) 26: 274-278.	
	5	BEHR, J.P. DNA Strongly Binds to Micelles and Vesicles Containing Lipopolyamines or Lipointercalants; <i>Tetrahedron Lett.</i> (1986) 27:48:5861-5864.	
	6	BENSON, S.C. et al. Heterodimeric DNA-binding dyes designed for energy transfer: synthesis and spectroscopic properties; <i>Nucleic Acids Res.</i> (1993) 21:24:5727-5735.	
	7	BETTS, L., et al. A Nucleic Acid Triple Helix Formed by a Peptide Nucleic Acid-DNA Complex; <i>Science</i> (1995) 270: 1838-1841.	
	8	BHATTACHARYA, S. and MANDAL, S.S. Interaction of surfactants with DNA. Role of hydrophobicity and surface charge on intercalation and DNA melting; <i>Biochim. et Biophys. Acta.</i> (1997) 1323:29-44.	
	9	BHATTACHARYA, S. and MANDAL, S.S. Role of hydrophobic effect and surface charge in surfactant-DNA association; <i>Indian J. Biochem. &amp; Biophys.</i> (1997) 34:11-17.	
	10	BIER, F.F. and KLEINJUNG, F. Feature-size limitations of microarray technology - a critical review; <i>Fresenius J. Anal. Chem.</i> (2001) 371:151-156.	
	11	BIRNBOIM, H.C. and JEVCAK, J.J. Fluorometric Method for Rapid Detection of DNA Strand Breaks in Human White Blood Cells Produced by Low Doses of Radiation; <i>Cancer Res.</i> (1981) 41:1889-1892.	
	12	BLESSING, T. et al. Monomolecular collapse of plasmid DNA into stable virus-like particles; <i>Proc. Natl. Acad. Sci. USA</i> (1998) 95:1427-1431.	
	13	BRONICH, T.K. et al. Recognition of DNA Topology in Reactions between Plasmid DNA and Cationic Copolymers; <i>J. Am. Chem. Soc.</i> (2000) 122:35:8339-8343.	
	14	CARDULLO, R.A. et al. Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer; <i>Proc. Natl. Acad. Sci. USA</i> (1988) 85:8790-8794.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

2

of

11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	15	CASTRO, A. and WILLIAMS, J.G.K. Single-molecule detection of specific nucleic acid sequences in unamplified genomic DNA; <i>Anal. Chem.</i> (1997) 69:19:3915-3920.	
	16	CHANDAR, P. et al. Fluorescence probe investigation of anionic polymer-cationic surfactant interactions; <i>Macromolecules</i> (1988) 21:950-953.	
	17	CHEHAB, F.F. and KAN, Y.W. Detection of specific DNA sequences by fluorescence amplification: A color complementation assay; <i>Proc. Natl. Acad. Sci. USA</i> (1989) 86:9178-9182.	
	18	CHEN, L. and FRANKEL, A.D. A peptide interaction in the major groove of RNA resembles protein interactions in the minor groove of DNA; <i>Proc. Natl. Acad. Sci. USA</i> (1995) 92:5077-5081.	
	19	CHEN, L. et al. Highly sensitive biological and chemical sensors based on reversible fluorescence quenching in a conjugated polymer; <i>Proc. Natl. Acad. Sci. USA</i> (1999) 96:22:12287-12292.	
	20	CHEN, W. et al. Using Ethidium Bromide to Probe the Interactions between DNA and Dendrimers; <i>Langmuir</i> (2000) 16:15-19.	
	21	DELLING, U. et al. The number of positively charged amino acids in the basic domain of Tat is critical for trans-activation and complex formation with TAR RNA; <i>Proc. Natl. Acad. Sci. USA</i> (1991) 88:6234-6238.	
	22	DEMIDOV, V.V. PNA and LNA throw light on DNA; <i>Trends in Biotechnology</i> (2003) 21:1:4-7.	
	23	DEMIDOV, V.V. et al. Stability of peptide nucleic acids in human serum and cellular extracts; <i>Biochem. Pharmacol.</i> (1994) 48:6:1310-1313.	
	24	DIDENKO, V.V. DNA Probes Using Fluorescence Resonance Energy Transfer (FRET): Designs and Applications; <i>BioTechniques</i> (2001) 31:5:1106-1121.	
	25	DOGARIU, A. et al. Time-resolved Förster energy transfer in polymer blends; <i>Synthetic Metals</i> (1999) 100:95-100.	
	26	DUFOURCQ, J. et al. Molecular assembling of DNA with amphipathic peptides; <i>FEBS Lett.</i> (1998) 421:7-11.	
	27	EASTMAN, S.J. et al. Biophysical characterization of cationic lipid: DNA complexes; <i>Biochim. et Biophys. Acta</i> (1997) 1325:41-62.	
	28	EGHOLM, M. et al. PNA hybridizes to complementary oligonucleotides obeying the Watson-Crick hydrogenbonding rules; <i>Nature</i> (1993) 365:566-568.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **3**of **11****Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	29	EGHOLM, M. et al. Recognition of Guanine and Adenine in DNA by Cytosine and Thymine Containing Peptide Nucleic Acids (PNA); <i>J. Am. Chem. Soc.</i> (1992) 114:9677-9678.	
	30	ENGLEBIENNE, P. Synthetic materials capable of reporting biomolecular recognition events by chromic transition; <i>J. Mater Chem.</i> (1999) 9:1043-1054.	
	31	ESKILSSON, K. et al. DNA-Surfactant Complexes at Solid Surfaces; <i>Langmuir</i> (2001) 17:1666-1669.	
	32	FELGNER, P.L. et al. Nomenclature for Synthetic Gene Delivery Systems; <i>Hum. Gene Ther.</i> (1997) 8:511-512.	
	33	FERGUSON, B.Q. and YANG, D.C.H. Localization of Noncovalently Bound Ethidium in Free and Methionyl-tRNA Synthetase Bound tRNA <sup>Met</sup> by Singlet-Singlet Energy Transfer; <i>Biochemistry</i> (1986) 25:5298-5304.	
	34	FERNANDEZ-SAZ, M. et al. A Cationic Cyclophane That Forms a Base-Pair Open Complex with RNA Duplexes; <i>J. Am. Chem. Soc.</i> (1996) 118:4739-4745.	
	35	FRANKEL, A.D. Peptide models of the Tat-TAR protein-RNA interaction; <i>Prot. Sci.</i> (1992) 1:1539-1542.	
	36	FUTAMI, J. et al. Optimum Modification for the Highest Cytotoxicity of Cationized Ribonuclease; <i>J. Biochem.</i> (2002) 132:223-228.	
	37	GALLEGO, J. and VARANI, G. Targeting RNA with Small-Molecule Drugs: Therapeutic Promise and Chemical Challenges; <i>Acc. Chem. Res.</i> (2001) 34:10:836-843.	
	38	GALLO, R and MONTAGNIER, L. AIDS in 1988; <i>Sci. Am.</i> (1988) 259:4: 41-48.	
	39	GANACHAUD, F. et al. Adsorption of Single-Stranded DNA Fragments onto Cationic Aminated Latex Particles; <i>Langmuir</i> (1997) 13:701-707.	
	40	GAYLORD, B. S. et al. DNA detection using water-soluble conjugated polymers and peptide nucleic acid probes; <i>Proc. Natl. Acad. Sci. USA</i> (2002) 99:17:10954-10957.	
	41	GAYLORD, B.S. et al. Water-Soluble Conjugated Oligomers: Effect of Chain Length and Aggregation on Photoluminescence-Quenching Efficiencies; <i>J. Am. Chem. Soc.</i> (2001) 123:6417-6418.	
	42	GAYLORD, B.S. et al. DNA Hybridization Detection with Water-Soluble Conjugated Polymers and Chromophore-Labeled Single-Stranded DNA; <i>J. Am. Chem. Soc.</i> (2003) 125:896-900.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

Sheet 4 of 11

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	43	GERSHON, H. et al. Mode of Formation and Structural Features of DNA-Cationic Liposome Complexes Used for Transfection; <i>Biochemistry</i> (1993) 32:7143-7151.	
	44	GIESEN, U. et al. A formula for thermal stability (T <sub>m</sub> ) prediction of PNA/DNA duplexes; <i>Nucleic Acids Res.</i> (1998) 26:21:5004-5006.	
	45	GÖSSL, L. et al. Molecular Structure of Single DNA Complexes with Positively Charged Dendronized Polymers; <i>J. Am. Chem. Soc.</i> (2002) 124:6860-6865.	G
	46	HAGE, D.S.. Immunoassays; <i>Anal. Chem.</i> (1999) 71:12:294R-304R.	
	47	HANVEY, J.C. et al. Antisense and Antigene Properties of Peptide Nucleic Acids; <i>Science</i> (1992) 258:1481-1485.	
	48	HARADA, A. and KATAOKA, K. Chain Length Recognition: Core-Shell Supramolecular Assembly from Oppositely Charged Block Copolymers; <i>Science</i> (1999) 283:65-67.	
	49	HO, H.A. et al. Colorimetric and Fluorometric Detection of Nucleic Acids Using Cationic Polythiophene Derivatives; <i>Angew. Chem. Int. Ed.</i> (2002) 41:9:1548-1551.	
	50	IZUMRUDOV, V.A. et al. The influence of chain length of a competitive polyanion and nature of monovalent counterions on the direction of the substitution reaction of polyelectrolyte complexes; <i>Makromol. Chem., Rapid Commun.</i> (1988) 9:7-12.	
	51	IZUMRUDOV, V.A. et al. Competitive Reactions in Solutions of DNA and Water-Soluble Interpolyelectrolyte Complexes; <i>Biopolymers</i> (1995) 35:523-531.	
	52	IZUMRUDOV, V.A. et al. Competitive Displacement of Ethidium Cations Intercalated in DNA by Polycations; <i>Dokl. Phys. Chem.</i> (1995) 342:Nos. 4-6: 150-153.	
	53	IZUMRUDOV, V.A. et al. Ethidium Bromide as a Promising Probe for Studying DNA Interaction with Cationic Amphiphiles and Stability of the Resulting Complexes; <i>Langmuir</i> (2002) 18:10348-10356.	
	54	IZUMRUDOV, V.A. et al. Controllable Stability of DNA-Containing Polyelectrolyte Complexes in Water-Salt Solutions; <i>Biopolymers</i> . (1999) 52:94-108.	
	55	IZUMRUDOV, V.A. and ZHIRYAKOVA, M.V. Stability of DNA-containing interpolyelectrolyte complexes in water-salt solutions; <i>Macromol. Chem. Phys.</i> (1999) 200:11:2533-2540.	
	56	JAIN, C. and BELASCO, J.G. Rapid Genetic Analysis of RNA-Protein Interactions by Translational Repression in <i>Escherichia coli</i> ; <i>Methods Enzymol.</i> (2000) 318:309-332.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

Sheet 5 of 11

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	57	JENKINS, Y. and BARTON, J.K. A Sequence-Specific Molecular Light Switch: Tethering of an Oligonucleotide to a Dipyridophenazine Complex of Ruthenium (II); <i>J. Am. Chem. Soc.</i> (1992) 114:8736-8738.	
	58	JOHANSSON, M.K. et al. Intramolecular Dimers: A New Strategy to Fluorescence Quenching in Dual-Labeled Oligonucleotide Probes; <i>J. Am. Chem. Soc.</i> (2002) 124:6950-6956.	
	59	KABANOV, A.V. et al. DNA Interpolyelectrolyte Complexes as a Tool for Efficient Cell Transformation; <i>Biopolymers.</i> (1991) 31:1437-1443.	
	60	KABANOV, A.V. and KABANOV, V.A. DNA Complexes with Polycations for the Delivery of Genetic Material into Cells; <i>Bioconjugate Chem.</i> (1995) 6:7-20.	
	61	KABANOV, V.A. et al. Cooperative Interpolyelectrolyte Reactions; <i>Makromol. Chem. Suppl.</i> (1985) 13:137-155.	
	62	KARN, J. et al. HIV A Practical Approach; RNA binding assays for the regulatory proteins Tat and Rev; <i>IRL Press, New York</i> ; (1995) 9:147-165.	
	63	KATAYOSE, S. and KATAOKA, K. Water-Soluble Polyion Complex Associates of DNA and Poly(ethylene glycol)-Poly(L-lysine) Block Copolymer; <i>Bioconjugate Chem.</i> (1997) 8:702-707.	
	64	KIRCHEIS, R. et al. Tumor targeting with surface-shielded ligand-polycation DNA complexes; <i>J. Controlled Release</i> ; (2001) 72:165-170.	
	65	KIRSH, Yu. E. et al. Comparison of Properties of an Oxime-Bound Partially Quaternized Poly-4-Vinylpyridine and a Monomer Analogous Oxime; <i>Eur. Polym. J.</i> (1974) 10:393-399.	
	66	KNEMEYER, J. et al. <del>Probes for Detection of Specific DNA...</del> <i>Anal. Chem.</i> (2000) 72:3717- <u>3724</u>	
	67	KWON, I.C. et al. Electrically Erodible polymer gel for controlled release of drugs; <i>Nature</i> (1991) 354:291-293.	
	68	LECLERC M. Optical and Electrochemical Transducers Based on Functionalized Conjugated Polymers; <i>Adv. Mater.</i> (1999) 11:18:1491-1498.	
	69	LEE, M.A. et al. ResonSense®: simple linear fluorescent probes for quantitative homogeneous rapid polymerase chain reaction; <i>Anal. Chim. Acta</i> (2002) 457:61-70.	
	70	LE-PECQ, J.B. and PAOLETTI, C. A Fluorescent Complex between Ethidium Bromide and Nucleic Acids; <i>J. Mol Biol.</i> (1967) 27:87-106.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 6 of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	71	LEULLIOT, N. and VARANI, G. Current Topics in RNA-Protein Recognition: Control of Specificity and Biological Function through Induced Fit and Conformational Capture; <i>Biochemistry</i> (2001) 40:27:7947-7956.	
	72	LIU, B. et al. Effect of Chromophore-Charge Distance on the Energy Transfer Properties of Water-Soluble Conjugated Oligomers; <i>J. Am. Chem. Soc.</i> (2003) 125:6705-6714.	
	73	MAKINO, S. et al. Molecular Characterization and Protein Analysis of the <i>cap</i> Region, Which is Essential for Encapsulation in <i>Bacillus anthracis</i> ; <i>J. Bacteriol.</i> (1989) 171:2:722-730.	
	74	MANNING, G.S. Thermodynamic Stability Theory for DNA Doughnut Shapes Induced by Charge Neutralization; <i>Biopolymers</i> . (1980) 19:37-59.	
	75	MANNING, G.S. The Possibility of Intrinsic Local Curvature in DNA Toroids; <i>Biopolymers</i> . (1981) 20:1261-1270.	
	76	MANNING, G.S. The molecular theory of polyelectrolyte solutions with applications to the electrostatic properties of polynucleotides; <i>Qrtly Review of Biophysics</i> . (1978) v.11: 179-246.	
	77	MARUYAMA, A. et al. Characterization of Interpolyelectrolyte Complexes between Double-Stranded DNA and Polylysine Comb-Type Copolymers Having Hydrophilic Side Chains; <i>Bioconjugate Chem.</i> (1998) 9:292-299.	
	78	MATSUMOTO, C; et al. High-Throughput Screening Utilizing Intramolecular Fluorescence Resonance Energy Transfer for the Discovery of the Molecules that Bind HIV-1 TAR RNA Specifically; <i>Bioorg. Med. Chem. Lett.</i> (2000) 10:1857-1861.	
	79	MCLOUGHLIN, D.M. et al. A simple and effective separation and purification procedure for DNA fragments using Dodecyltrimethylammonium bromide; <i>Bioseparation</i> . (2001) 9:307-313.	
	80	MCQUADE, D.T. et al. Conjugated Polymer-Based Chemical Sensors; <i>Chem. Rev.</i> (2000) 100:2537-2574.	
	81	MCQUADE, D.T. et al. Signal amplification of a "Turn-On" Sensor: Harvesting the Light Captured by a Conjugated Polymer; <i>J. Am. Chem. Soc.</i> (2000) 122:12389-12390.	
	82	MEL'NIKOV, S.M. et al. Discrete Coil - Globule Transition of Large DNA Induced by Cationic Surfactant; <i>J. Am. Chem. Soc.</i> (1995) 117:2401-2408.	
	83	MERGNY, J.L. et al. Fluorescence Energy Transfer between Two Triple Helix-Forming Oligonucleotides Bound to Duplex DNA; <i>Biochemistry</i> . (1994) 33:15321-15328.	
	84	MIAO, Y.J. et al. Photophysics of Poly(paracyclophan-1-ene) and Derivatives: Evidence for Intrachain Energy Transfer and Chromophore Aggregation; <i>J. Am. Chem. Soc.</i> (1995) 117:11407-11420.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 7 of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	85	MILLER, I.R. and BACH, D. Interaction of DNA with Heavy Metal Ions and Polybases: Cooperative Phenomena; <i>Biopolymers</i> . (1968) 6:169-179.	
	86	MINEHAN, D.S. et al. Kinetics of DNA Binding to Electrically Conducting Polypyrrole Films; <i>Macromolecules</i> . (1994) 27:777-783.	
	87	MORGAN, A.R. and PULLEYBLANK, D.E. Native and Denatured DNA, Cross-Linked and Palindromic DNA and Circular Covalently-Closed DNA Analysed by a Sensitive Fluorometric Procedure; <i>Biochem. Biophys. Res. Commun.</i> (1974) 61:2:396-403.	
	88	NIELSEN, P.E. Applications of peptide nucleic acids, <i>Analytical biotechnology</i> . (1999) 10:71-75.	
	89	NGUYEN, H-K, et al. Nonviral Transfer Technology: Evaluation of polyether-polyethyleneimine graft copolymers as gene transfer agents; <i>Gene Ther.</i> (2000) 7:126-138.	
	90	NISHANIAN, P. et al. A Simple Method for Improved Assay Demonstrates that HIV p24 Antigen is Present as Immune Complexes in Most Sera from HIV-Infected Individuals; <i>J. Infect. Dis.</i> (1990) 162:21-28.	
	91	NUOVO, G.J. <i>In Situ</i> Localization of PCR-Amplified DNA and cDNA; <i>Methods Mol. Bio.</i> (2000) 123:217-238.	
	92	OLINS, D.E. et al. Model Nucleoprotein Complexes: Studies on the Interaction of Cationic Homopolypeptides with DNA; <i>J. Mol. Biol.</i> (1967) 24:157-176.	
	93	PASTERNAK, R.F. et al. Long-Range Fluorescence Quenching of Ethidium Ion by Cationic Porphyrins in the Presence of DNA; <i>J. Am. Chem. Soc.</i> (1991) 113:6835-6840.	
	94	PATOLSKY, F. et al. Amplified DNA Detection by Electrogenated Biochemiluminescence and by the Catalyzed Precipitation of an Insoluble Product on Electrodes in the Presence of the Doxorubicin Intercalator; <i>Angew. Chem. Int. Ed.</i> (2002) 41:18:3398-3402.	
	95	PATOLSKY, F. et al. Electronic Transduction of DNA Sensing Processes on Surfaces: Amplification of DNA Detection and Analysis of Single-Base Mismatches by Tagged Liposomes; <i>J. Am Chem. Soc.</i> (2001) 123:5194-5205.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 8

of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
missing	96	PETERLINZ, K.P. et al. Observation of Hybridization and Dehybridization of Thiol-Tethered DNA using Two-Color Surface Plasmon Resonance Spectroscopy; <i>J. Am. Chem. Soc.</i> (1997) 119:3401-3402.	
	97	PETTY, J.T. et al. Thermodynamic Characterization of the Association of Cyanine Dyes with DNA; <i>J. Phys. Chem. B.</i> (2000) 104:7221-7227.	
	98	PILIPENKO, E.V. et al. A cell cycle-dependent protein serves as a template-specific translation initiation factor; <i>Genes &amp; Dev.</i> (2000) 14:2028-2045.	
	99	PINTO, M.R. and SCHANZE, K.S. Conjugated Polyelectrolytes: Synthesis and Applications; <i>Synthesis.</i> (2002) 9:1293-1309.	
	100	PLANK, C. et al. Branched Cationic Peptides for Gene Delivery: Role of Type and Number of Cationic Residues in Formation and <i>in Vitro</i> Activity of DNA Polyplexes; <i>Hum. Gene Ther.</i> (1999) 10:319-332.	
	101	PORTELA, A. and DIGARD, P. The influenza virus nucleoprotein: a multifunctional RNA-binding protein pivotal to virus replication; <i>J. Gen. Virol.</i> (2002) 83:723-734.	
	102	PUGLISI, J.D. et al. Conformation of the TAR RNA-Arginine Complex by NMR Spectroscopy; <i>Science.</i> (1992) 257:76-80.	
	103	PULLMAN, B. et al. Two Aspects of DNA Polymorphism and Microheterogeneity: Molecular Electrostatic Potential and Steric Accessibility; <i>J. Biochem.</i> (1982) 124:229-238.	
	104	RICHTER, S. et al. Specific HIV-1 TAR RNA Loop Sequence and Functional Groups are Required for Human Cyclin T1-Tat-TAR Ternary Complex Formation; <i>Biochemistry.</i> (2002) 41:6391-6397.	
	105	SAGHATELIAN, A. et al. DNA Detection and Signal Amplification via an Engineered Allosteric Enzyme; <i>J. Am. Chem. Soc.</i> (2003) 125:344-345.	
	106	SAIKI, R.K. et al. Enzymatic Amplification of $\beta$ -Globin Genomic Sequences and Restriction Site Analysis for Diagnosis of Sickle Cell Enemia; <i>Science.</i> (1985) 230:1350-1354.	
	107	SCHORK, N.J. et al. Single nucleotide polymorphisms and the future of genetic epidemiology; <i>Clin. Genet.</i> (2000) 58:250-264.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 9

of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	108	SEYMOUR, L.W. et al. Cationic block copolymers as self-assembling vectors for gene delivery; <i>Self-assembling Complexes for Gene Delivery</i> ; (1998) 11:219-239.	
	109	SHINOZUKA, K. et al. A Novel Multifunctionality Labelled DNA Probe Bearing an Intercalator and a Fluorophore; <i>J. Chem. Soc., Chem. Commun.</i> (1994) 1377-1378.	
	110	DE SMEDT, S.C. et al. Cationic Polymer Based Gene Delivery Systems; <i>Pharm. Res.</i> (2000) 17:2:113-126.	
	111	SMITH, J.O. et al. Molecular Recognition of PNA-Containing Hybrids: Spontaneous Assembly of Helical Cyanine Dye Aggregates on PNA Templates; <i>J. Am. Chem. Soc.</i> (1999) 121:2686-2695.	
	112	SMITH, P. et al. Surfactant structure around DNA in aqueous solution; <i>Phys. Chem. Chem. Phys.</i> (2000) 2:1305-1310.	
	113	STENDER, H. et al. PNA for rapid microbiology; <i>J. Microbiological Methods</i> . (2002) 48:1-17.	
	114	STORK, M. et al. Energy Transfer in Mixtures of Water-Soluble Oligomers: Effect of Charge, Aggregation, and Surfactant Complexation; <i>Adv. Mater.</i> (2002) 14:5:361-366.	
	115	SU, X. et al. Au nanoparticle- and silver-enhancement reaction-amplified microgravimetric biosensor; <i>Chem. Commun.</i> (2001) 755-756.	
	116	SULLENGER, B.A. and GILBOA, E. Emerging clinical applications of RNA; <i>Nature</i> . (2002) 418:252-258.	
	117	TAKAKUSA, H. et al. Design and Synthesis of an Enzyme-Cleavable Sensor Molecule for Phosphodiesterase Activity Based on Fluorescence Resonance Energy Transfer; <i>J. Am. Chem. Soc.</i> (2002) 124:8:1653-1657.	
	118	TAMILARASU, N. et al. A New Strategy for Site-Specific Protein Modification: Analysis of a Tat Peptide-TAR RNA Interaction; <i>Bioconjugate Chem.</i> (2001) 12:2:135-138.	
	119	TANG, M.X. and SZOKA, F.C. The influence of polymer structure on the interactions of cationic polymers with DNA and morphology of the resulting complexes; <i>Gene Ther.</i> (1997) 4:823-832.	
	120	DEMERS, L.M. et al. Thermal Desorption; <i>J. Am. Chem. Soc.</i> (2002) 124, 11242-11249	
	121	TATON, T.A. et al. Scanometric DNA Array Detection with Nanoparticle Probes; <i>Science</i> . (2000) 289:1757-1760.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 10 of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	122	TATON, T.A. et al. Two-Color Labeling of Oligonucleotide Arrays via Size-Selective Scattering of Nanoparticle Probes; <i>J. Am. Chem. Soc.</i> (2001) 123:5164-5165.	
	123	TOMAC, S. et al. Ionic Effects on the Stability and Conformation of Peptide Nucleic Acid Complexes; <i>J. Am. Chem. Soc.</i> (1996) 118:5544-5552.	
	124	TRASER, S. et al. Syntheses and solution properties of water-soluble poly(p-phenylene)s bearing oligo(ethylene oxide) and trialkylamino side groups; <i>e-Polymers</i> . (2002) 32:1-39.	
	125	UMEK, R.M. et al. Electronic Detection of Nucleic Acids - A Versatile Platform for Molecular Diagnostics; <i>J. Mol. Diag.</i> (2001) 3:2:74-84.	
	126	VAISHNAV, Y.N. and WONG-STAAAL, F. The Biochemistry of Aids; <i>Ann. Rev. Biochem.</i> (1991) 60:577-630.	
	127	VARANI, G. RNA-Protein Intermolecular Recognition; <i>Acc. Chem. Res.</i> (1997) 30:5:189-195.	
	128	VINOGRADOV, S.V. et al. Self-Assembly of Polyamine-Poly(ethylene glycol) Copolymers with Phosphorothioate Oligonucleotides; <i>Bioconjugate Chem.</i> (1998) 9:805-812.	
	129	WANG, J. et al. Photoluminescence of Water-Soluble Conjugated Polymers: Origin of Enhanced Quenching by Charge Transfer; <i>Macromolecules</i> . (2000) 33:5153-5158.	
	130	WANG, J. et al. DNA Electrochemical Biosensor for the Detection of Short DNA Sequences Related to the Human Immunodeficiency Virus; <i>Anal. Chem.</i> (1996) 68:15:2629-2634.	
	131	ISOLA, N.R. et al. Surface-Enhanced Raman Gene Probe for HIV Detection; <i>Anal. Chem.</i> (1998) 70:1352-1356.	
	132	WANG, J. Survey and Summary From DNA biosensors to gene chips; <i>Nucleic Acid Res.</i> (2000) 28:16:3011-3016.	
	133	WANG, J. et al. Dendritic Nucleic Acid Probes for DNA Biosensors; <i>J. Am. Chem. Soc.</i> (1998) 120:8281-8282.	
	134	WANG, J. et al. Synthesis of AB(BA), ABA and BAB Block Copolymers of <i>tert</i> -Butyl Methacrylate (A) and Ethylene Oxide (B); <i>J. Polym. Sci., Part A: Polym. Chem.</i> (1992) 30:2251-2261.	
	135	WANG, Y. et al. Interaction of DNA with Cationic Micelles: Effects of Micelle Surface Charge Density, Micelle Shape, and Ionic Strength on Complexation and DNA Collapse; <i>Langmuir</i> . (2001) 17:1670-1673.	
	136	WARING, M. J. Complex Formation between Ethidium Bromide and Nucleic Acids; <i>J. Mol. Biol.</i> (1965) 13:269-282.	
	137	WEEKS, K.M. et al. Fragments of the HIV-1 Tat Protein Specifically Bind TAR RNA; <i>Science</i> . (1990) 249:1281-1285.	

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 11

of 11

**Complete if Known**

Application Number	10/779,412
Filing Date	February 13, 2004
First Named Inventor	Guillermo C. Bazan
Art Unit	1634
Examiner Name	Sisson, Bradley L.
Attorney Docket Number	51871-000004

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	138	WHITCOMBE, D. et al. Detection of PCR products using self-probing amplicons and fluorescence; <i>Nat. Biotechnol.</i> (1999) 17:804-807.	
	139	WOLFERT, M.A. et al. Polyelectrolyte Vectors for Gene Delivery: Influence of Cationic Polymer on Biophysical Properties of Complexes Formed with DNA; <i>Bioconjugate Chem.</i> (1999) 10:993-1004.	
	140	WYMAN, T.B. et al. Design, Synthesis, and Characterization of a Cationic Peptide that Binds to Nucleic Acids and Permeabilizes Bilayers; <i>Biochemistry.</i> (1997) 36:3008-3017.	
	141	XU, X.H. and BARD, A.J. Immobilization and Hybridization of DNA on an Aluminum(III) Alkanebisphosphonate Thin Film with Electrogenerated Chemiluminescent Detection; <i>J. Am. Chem. Soc.</i> (1995) 117:2627-2631.	
	142	YANG, J.S. and SWAGER, T.M. Fluorescent Porous Polymer Films as TNT Chemosensors: Electronic and Structural Effects; <i>J. Am. Chem. Soc.</i> (1998) 120:11864-11873.	
	143	JUNHUI, Z. et al. DNA Based Biosensors; <i>Biotechnol. Adv.</i> (1997) 15:43-58.	
	144		
	145		
	146		
	147		
	148		
	149		
	150		
	151		
	152		
	153		
	154		
	155		
	156		
	157		
	158		
	159		

Examiner's  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.